Walter McAfee, helped boost U.S. into space

SOUTH BELMAR — Dr. Walter S. Mc Afee, 80, a physicist who helped pioneer space exploration, died Saturday at his home here.

In 1946, Dr. Mc Afee made the mathematical calculations that enabled a Fort Monmouth team of scientists to bounce the first radio signals off the moon's surface from the Evans Signal Laboratory in Wall Township. The work, dubbed Project Diana, helped usher in the era of space exploration and the development of satellite communications and missile guidance systems.

His calculations earned him nationwide recognition and numerous awards, including the first U.S. Army Research and Development Achievement Award in 1961.

Dr. Mc Afee, the second of nine children of a carpenter, was born in One City, Texas, and first began tinkering with physics at high school in Texas.

"I was hearing of Einstein's work. I started hoping in a vague sort of way that I could get to a place where I could make a contribution," he said in a 1985 interview.

He earned a bachelor of science degree in mathematics, magna cum laude, from Wiley College in Marshall, Texas, and a master's degree in physics from Ohio State University, and a doctoral degree in nuclear physics from Cornell University in 1949.

To finance his higher education, he tried to obtain training in electronics, but found the field closed to black persons. One electrical institute in Chicago told him the institute didn't have adequate facilities for "colored people," he said in



White House ceremony: Dr. Walter S. Mc Afee (right) is shown with Dwight D. Eisenhower in 1956 shortly after the president presented the Fort Monmouth physicist with one of the first of the Secretary of the Army's research fellowships, which provided for post-doctoral study at Harvard University and at laboratories in Europe and Australia.

He had his own way of handling the prejudice he encountered over the years. "I tried to deal with each person as an individual," he said.

Dr. Mc Afee taught high school mathematics and science in Columbus, Ohio, and then in 1942 was hired as a mathematical physicist for the Fort Monmouth's Signal Corps.

During his 42 years at Fort Monmouth, he held a number of supervisory positions, retiring as scientific advisor to the U.S. Army Electronics Research and Development Command. While at Fort Monmouth, he also served as director of a scientific study on surveillance and target ac-

quisition for NATO. He also lectured in atomic and nuclear physics and solid state electronics at Monmouth College, West Long Branch.

His citations and awards include the Rosenwald Fellowship in Nuclear Physics, which he received in 1949 and which enabled him to complete his doctorate; and a Secretary of the Army research fellowship in 1956. In 1987 he was inducted into the Science Hall of Fame at Wiley College, and a scholarship was set up in his name to be given to an outstanding student in physics. In the Shore area, scholarships in mathematics, science or engineering are given in his name to high—achieving high school students by the Zetal Epsilon Lambda Chapter of Alpha Phi Alpha Fraternity in conjunction with the Fort Monmouth Chapter of the Armed Forces Communications and Electronics Associating.

Dr. Mc Afee was listed in American Men and Women of Science, Who's Who in the East, and Who's Who Among Black Americans. He received citations for his scientific and technical achievements from the New Jersey Council of Mayors in 1971, the Delta Sigma Theta Sorority in 1970, and the Negro Business and Professional Women in 1971. He was a member of a number of honorary scientific fraternities. He was a member of the Board of Trustees of Brookdale Community College, Lincroft, Middletown Township, the Monmouth County Museum, and the Monmouth County Chapter of the Alcoholism Council.

He also was awarded an honorary doctorate in science at Monmouth College in 1985 and received the Steven's Award at Steven's Institute of Technology in 1985.

Surviving are his wife, Viola Winston Mc Afee; two daughters, Diane Mercedes Mc Afee, San Jose, Calif., and Marsha Ann Bera-Morris, Washington D.C.; three brothers, Leo Cecil Mc Afee, Maud, Texas, Charles Franklin Mc Afee, West Allenhurst, Ocean Township and Milton Winfred Mc Afee, Long View, Texas; and three sisters, Amelia Robinson, New Brunswick, Sedalia Sims, Marshall, Texas, and Velma Williams, Houston. James H. Hunt Funeral Home, Asbury Park, is in charge of arrangements.